

Docket No. F-9014

Ser. No. 10/569,166

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**REMARKS**

Claims 1 to 14 have been cancelled. Claims 15 to 23 have been added.

Support for claim 16 can be found on page 20, lines 18 to 20. Support for claim 17 can be found on page 20, line 3. Support for claim 18 can be found on page 19, line 19.

Support for claim 19 can be found on page 20, line 12.

Support for claim 20 can be found on page 20, line 20.

Support for claim 22 can be found on page 21, the paragraph beginning at line 2.

Support for claim 23 can be found on page 21, the paragraph beginning at line 9.

Applicant's claim 15 provide that the plural function elements do not have electrodes and are connected to conductive wires by alloy joining to produce a module sheet. The conductive wires are eutectic reactive to silicon so that when

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current is applied to the conductive wires, the conductive wires are alloy joined to the function elements. These alloyed regions formed between the conductive wires and the function elements serve as electrodes.

With applicant's claimed arrangement, the conductive wires may be easily connected without previously forming positive and negative electrodes by which productivity is improved and production costs are reduced.

Regarding claim 22, for example, the alloy connective wires set forth therein have lower electrical and thermal conductivity as compared to aluminum wires and therefore advantageously, less electric current is required for joining and tensile strength is improved. Also, as regards to claim 23, for example, gold alloy allows for alloy joining due to cuctectic reaction at lower temperatures than does aluminum.

It is respectfully submitted that applicant's claimed arrangement is not disclosed in the cited Japanese Reference JP 9162434 nor are the advantageous features of applicant's claimed invention disclosed therein. The Examiner states that electric current to provide heat would have been obvious because an ohmic contact requires alloy or melting, the metal material. However, the Examiner has not cited any reference which discloses forming an alloyed connection between conductive wires with wire connecting parts of a function element such as a solar battery

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element. The Examiner has not cited any reference whcrcin the conductive wires are connected to a solar battery and wherein the conducting wires are eutectic reactive to silicon to thereby effect the joining and connection between the conductive wires and the battery element.

It is respectfully submitted that applicant's claims would not be rendered obvious by the cited Japanese Patent No. 9162434 and that this cited Japanese reference does not disclose the features of applicant's invention set forth in new claims 15 to 23 nor does the cited reference disclose any of the advantageous features of applicant's claims as set forth hereinbefore.

The 35 U.S.C. 112 objections have been carefully considered and all of these objections are rendered moot in view of the new claims.

Applicant respectfully requests a one-month extension of time for responding to the Office Action. The fee of \$65.00 (Small Entity) for the one-month extension is provided for in the charge authorization presented in the PTO Form 2038, Credit Card Payment form, provided herewith.

If there is any discrepancy between the fee(s) due and the fee payment authorized in the Credit Card Payment Form PTO-2038 or the Form PTO-2038 is

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missing or fee payment via the Form PTO-2038 cannot be processed, the USPTO is hereby authorized to charge any fee(s) or fee(s) deficiency or credit any excess payment to Deposit Account No. 10-1250.

In view of the above remarks, reconsideration and allowance of the claims is respectfully requested.

Respectfully submitted,

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